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September 26, 2002

Ms. Marlene H. Dortch Secretary Federal Communications Commission 445 12<sup>th</sup> Street, SW Washington, DC 20554

RE: IB Docket No. 01-185/ET Docket No. 00-258 Ex Parte Notice

Dear Ms. Dortch:

On September 25, 2002, William F. Adler of Globalstar, L.P. and the undersigned participated in a meeting with David Horowitz and Daniel Harrold of the Office of General Counsel regarding Globalstar, L.P.'s positions on issues in the above-referenced dockets, with particular reference to the Above 1 GHz MSS bands.

We reviewed how the issues regarding Mobile-Satellite Service ("MSS") spectrum had been raised in IB Docket No. 01-185 and ET Docket 00-258. With particular reference to suggestions that use of MSS spectrum for terrestrial service by MSS licensees requires licensing by competitive bidding, we discussed the points on the enclosed "ATC: ORBIT Act Considerations." We also distributed the enclosed handout, "Flexibility for Mobile Satellite Service Providers" (dated September 25, 2002).

Pursuant to Section 1.1206(b)(2) of the Commission's Rules, this letter and the enclosures are being filed electronically over the Commission's Electronic Comment Filing System.

Respectfully submitted,

William D. Wallace

**Enclosures** 

#### ATC: ORBIT Act Considerations

The purpose of ATC is to offer integrated satellite-terrestrial service in the same spectrum—one handset, one telephone number, one transparent service for subscribers.

- Subscribers would perceive MSS satellite and terrestrial services as a single service with two operational modes.
- Dual-mode ATC/MSS would involve geographic separation of frequencies, rather than frequency separation between services.
- Technically, there would be no specifically identifiable ATC spectrum segment. Because all ATC transmissions are received at the satellites as interference, ATC frequencies may vary in regions where ATC is available to maximize spectrum efficiency and reuse, depending upon the satellite beam patterns on the surface of the earth.
- No new service is created by authorization of flexible uses under Section 303(y).

The relevant ORBIT Act language states: "Notwithstanding any other provision of law, the Commission shall not have the authority to assign by competitive bidding orbital locations or spectrum used for the provision of international or global satellite communications services."

- MSS licensees use spectrum allocated globally for an international or global service, whether or not they provide ATC. ATC will be integrated into MSS—one handset, one phone number, one bill for services.
- The concern underlying the ORBIT Act that auctions for MSS spectrum in the United States would lead to auctions in other countries remains a concern with ATC. Countries that have no ORBIT Act will only recognize that the U.S. is auctioning satellite spectrum, not that the auction is for a terrestrial use to avoid ORBIT Act.
- MSS systems involve huge upfront costs for construction and launch (\$3-5 billion). Global, sequential auctions could result in the demise of the MSS industry—the opposite goal of ATC.



### **Federal Communications Commission**

Flexibility for Mobile Satellite Service Providers
Ancillary Terrestrial Component
September 25, 2002

**Globalstar** 





### A Healthy MSS Industry Serves the National Interest

- No Homeland Security without MSS
  - "Homeland defense will be dependent on the development of integrated satellite systems that can be used for both commercial and government use said industry experts at the International Satellite and Communications exchange." - PR Newswire, Sept. 2, 2002
- No Emergency Preparedness without MSS
  - An infrastructure resistant to local man-made and natural catastrophes
  - "According to Hon. John Stenbit, ... one of the problems on Sept. 11 was the congestion of telecommunication systems.
     As a result, the government deployed a non-blocking cell phone system for first responders and first callers.
     It works on the ground and uses Globalstar as a back-up." PR Newswire, Sept. 2, 2002



### A Healthy MSS Industry Serves the National Interest

- No Emergency Preparedness without MSS (con't)
  - "Now, defense firm Raytheon Co. is packaging the JPS [Communications] system to create a mobile command center aimed at emergency personnel.... To demonstrate how the system works, the command center has been loaded onto a white Chevy Suburban truck with radio antennas and a satellite dish on the roof. Dubbed 'First Responder,' it connects the JPS system with three other communications networks, including the **Globalstar** satellite system.
    - "Keeping Post-Disaster Rescuers Connected," Wall Street Journal, Aug. 28, 2002, p. B1.





## A Healthy MSS Industry Serves the National Interest (con't)

- No service to Americans in rural and remote areas without satellite communications
  - "These [2 GHz] satellite systems will ... promote development of regional and global communications to unserved communities in the United States, its territories and possessions, including rural and Native American areas, as well as worldwide." - FCC 2 GHz Rulemaking Proceeding
  - Satellites remain only way to provide ubiquitous resilient, interoperable coverage
  - Eighteen months later, only Globalstar provides connectivity for Myra Jodie, Navajo teenager in Arizona who won computer but had no phone





# A Healthy MSS Industry Serves the National Interest (con't)

- U.S. industry and government benefit from healthy global satellite communications systems
  - In Third World countries, MSS contributes to improved quality of life, economic prosperity, global trade, business efficiency, maritime and aviation safety
  - MSS allows U.S. military and diplomatic community to use handsets where there is no terrestrial infrastructure
  - Globalstar phones manufactured in U.S. by QUALCOMM certified by Russian Ministry of Civil Defense for standard use in defense and civil preparedness. News Release, March 14, 2002



#### What is ATC on Globalstar?

- Dual-mode phone (satellite and terrestrial)
- One phone number, one service provider for both modes
- Satellite mode available globally, including ATC areas
- ATC available in selected urban areas where buildings make satellite line-of-sight reception difficult
- ATC cells on the ground similar to cellular/PCS
- ATC mini-cells also deployable for emergencies to create local area networks where needed
   Dual-mode service for MSS customers
- Dual-mode service for MSS customers with unique needs -- not cellular/PCS



### **ATC Authority is in the Public Interest**

- ATC authority for MSS operators is completely consistent with decades of FCC policy and precedent
  - Promotes alternative supply of communications services
  - Provides service to niche markets otherwise not served at all, expanding nationwide telecommunications coverage
  - Significantly improves spectrum utilization by licensees
  - Improves the economics of MSS operation, thereby contributing to long-term viability of a critical segment of the U.S. and global communications infrastructure
  - Jump-starts new product development, which benefits manufacturing sector
  - Makes MSS a versatile option for public safety organizations



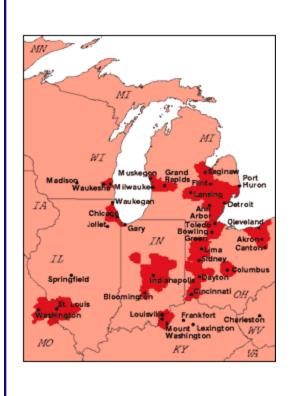
### **ATC Principles**

- Satellites provide ubiquitous service
  - Cover rural and underserved areas
  - Provide resilient and complementary service when terrestrial infrastructure is overloaded or damaged
- Terrestrial towers provide metro coverage and in-building penetration
  - Terrestrial capability provides higher service quality and increases spectrum efficiency in metro areas
- Satellite/terrestrial combination provides the best of both worlds for government, military and niche commercial markets





### **Cellular Terrestrial Coverage**





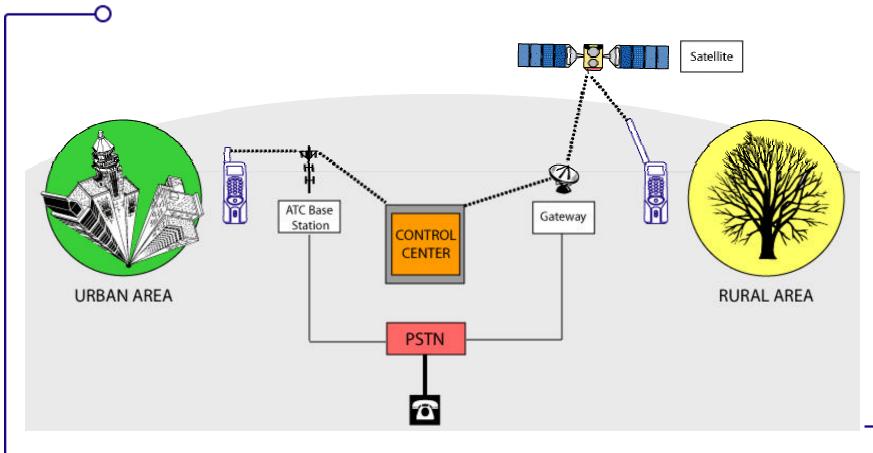


**Globalstar** 





### Worldwide Satellite and ATC Communication Service





## **Existing Control Center Brings Satellite and ATC Together**





- Centralized resource allocation is the key to
  - Spectrum efficiency
  - Service quality and seamless roaming





### **Globalstar ATC Applications**

- Public Safety
  - Possible scenario:
    - Operations in remote areas without terrestrial services



- Initial response teams have immediate availability of Satellite service
- As situation demands and additional users arrive on site, portable ATC base stations allow thousands of users on ATC in limited areas
- The same phone can be used seamlessly



## ATC Authority Cannot Be Separated from MSS License

- Negative impact on Globalstar's L/S Band Operating System
  - Partial severance of spectrum would create new, unaffiliated terrestrial service, undermining essential rationale for ATC
  - Force costly redesign of system software
  - Require modification of existing handsets
  - Reduce system capacity, perhaps ruinously
  - Limit introduction of new MSS services such as aircraft monitoring and en route communications
  - Keep cost of service high, subscriber base and income low





## ATC Authority Cannot Be Separated from MSS License (con't)

- Globalstar's L/S Band Operating System (con't)
  - Foreclose financing for replacement/next generation system
  - Compromise Globalstar's ability to avoid interference to, and coordinate with, radioastronomy sites, GPS, GLONASS, ITFS, others
  - And terrestrial industry is not interested in this band!
- Impact on 2 GHz MSS Systems
  - L/S Band considerations apply here as well for operating MSS systems
- Conflicting business objectives will always preclude cooperation between MSS and Cellular/PCS





## ATC Authority Cannot Be Separated from MSS License (con't)

- Separate MSS/ATC operation (i.e., spectrum sharing) is not technically feasible in any band
  - No way to coordinate nationwide channel re-use in separate MSS and cellular systems
  - No reasonable way to manage interference between two separate mobile systems
  - No equitable way to assign channels dynamically to different systems
  - Creates host of operational support systems problems for numbering, billing, roaming, etc.



## ATC Authority Cannot Be Separated from MSS License (con't)

- ATC by separate licensee could not be implemented in near term, and delay would disserve the public interest
  - If not available exclusively to current MSS licensees, then not "ancillary" and no reason to proceed
  - New spectrum allocation rulemaking proceedings take months, if not years
  - New sources of in-band and out-of-band interference where interference is successfully managed today
  - Auction inconsistent with essential rationale of ORBIT Act
  - No mutual exclusivity under applicable precedents Globalstar.
  - Expect lengthy period of litigation, obviating all public interest benefits to MSS industry, public safety community and consumers



### Summary

- Terrestrial wireless does not need MSS's spectrum
  - 3G is not happening any time soon
  - Lifting of spectrum cap and reallocation of government spectrum at
     1.7 GHz address perceived longer-term shortage
  - Elimination of analog (AMPS) phones and completion of digital migration frees up channels for 2.5G or 3G services
  - Alleged needs of terrestrial wireless do not trump public interest in healthy MSS industry
     Globalstar



### Summary (con't)

- Terrestrial wireless does not need MSS's spectrum (con't)
  - "[Verizon] says its need for Nextwave's licenses has declined, and that it won't have to acquire new spectrum for 18-24 months. Verizon deployed new technology more quickly than expected, boosting the capacity of its wireless network, said Ivan Seidenberg, president and co-chief executive officer. The increased capacity 'gives us some time to sort through the various options' for gaining access to new spectrum, he said. Those options include acquisitions, buying spectrum at auction, partnering with another carrier, or leasing network capacity, he added." Globalstar
    - TR Daily, January 31, 2002, p.7.



### Summary (con't)

- Grant of ATC authority to L/S Band MSS would
  - Boost an important, struggling industry by increasing potential subscribers
  - Allow MSS to meet important public safety and emergency services requirements
  - Result in exciting new options for consumers
  - Optimize use of existing spectrum
- ATC authority is valuable to consumers and to MSS licensees.
- ATC authority should be implemented expeditiously

